



MAP ACADEMY

Methodology, Analytics & Psychometrics



Mixed Methods Approaches to Facilitate Cultural Understanding: A Social-Ecological Framework

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Methodology Application Series

February 5, 2016

'I Am Not Black ...'

- "I Am NOT Black, You are NOT White." video by Prince Ea (2015) may be viewed at <https://www.youtube.com/watch?v=q0qD2K2RWkc>



Outline

- Definitions
- Contexts
 - Societal
 - Interpersonal
 - Personal
- Methodological Processes
- Literacies & Language
- Wrapping Up



Definitions of Mixed Methods

- Philosophical, methodological, or methods-based?

Methods Based

Mixed methods research designs “collect both qualitative and quantitative data so that ... the combined strengths of qualitative and quantitative methods ... accomplish[es] more than would have been possible with one method alone” (Morgan, 2014, p. xiii)

Methodologically & Philosophically Based

Mixed methods researchers or “team[s] of researchers combine elements of qualitative and quantitative ... approaches (e.g., ... qualitative and quantitative viewpoints, data collection, analysis, inference techniques) for ... breadth and depth of understanding and corroboration” (Johnson, Onwuegbuzie, & Turner, p. 123)

- Dialectical stance: Using different paradigms together
(Greene, 2007)

Culture

A set of beliefs that:

- comes from our bones
- we take for granted (Eagleton, 2000)

- Not singular
- Not geographically bound
- More than researcher-perceived ethnicity

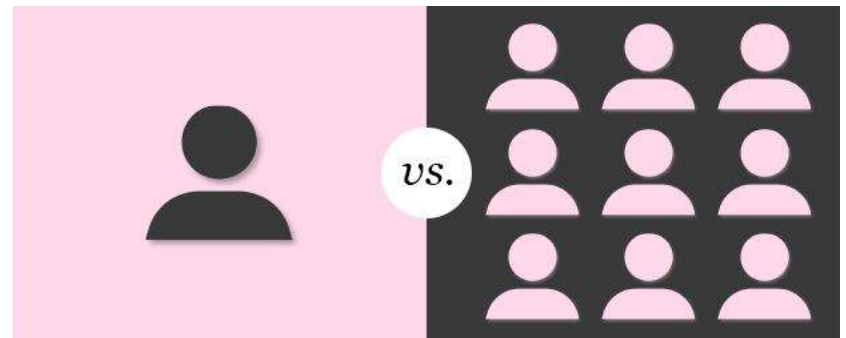
Personal & collective
culture

(Valsiner, 2007)

Collective Cultural Values

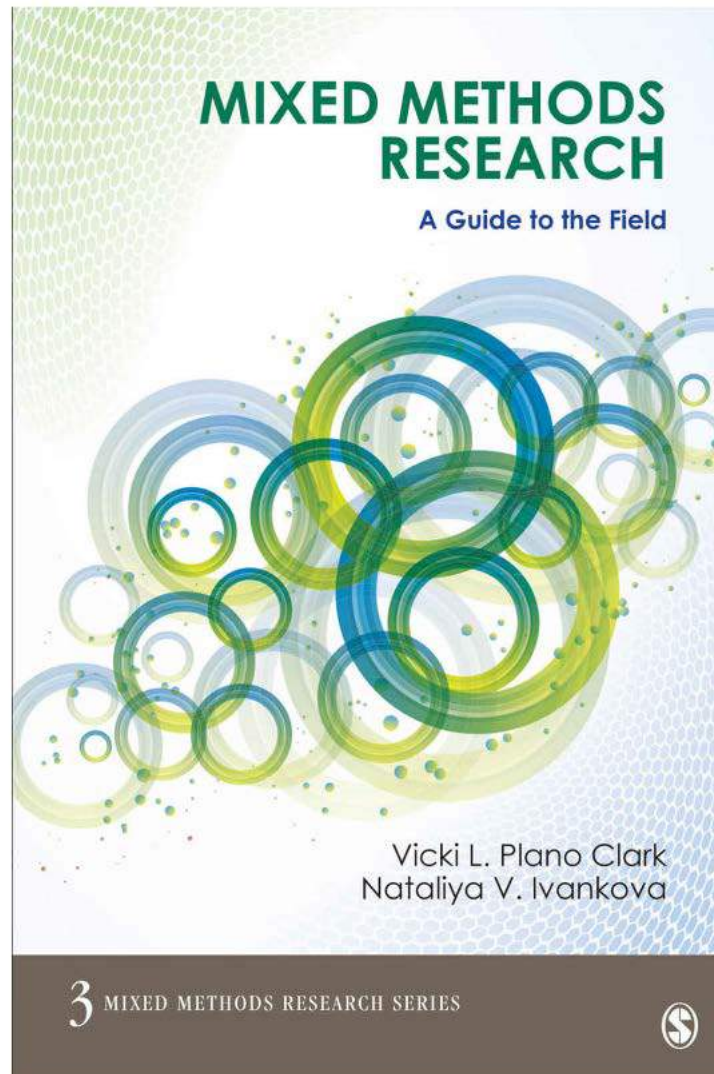
(Hofstede, 2001)

- Hierarchical authority / power distance
- Polite obedience
- **Collectivist vs. individualist**
 - Dependence vs. independence on institutional organizations
- Uncertainty avoidance
- Being “seen and not heard”



Plano Clark & Ivankova (2016)

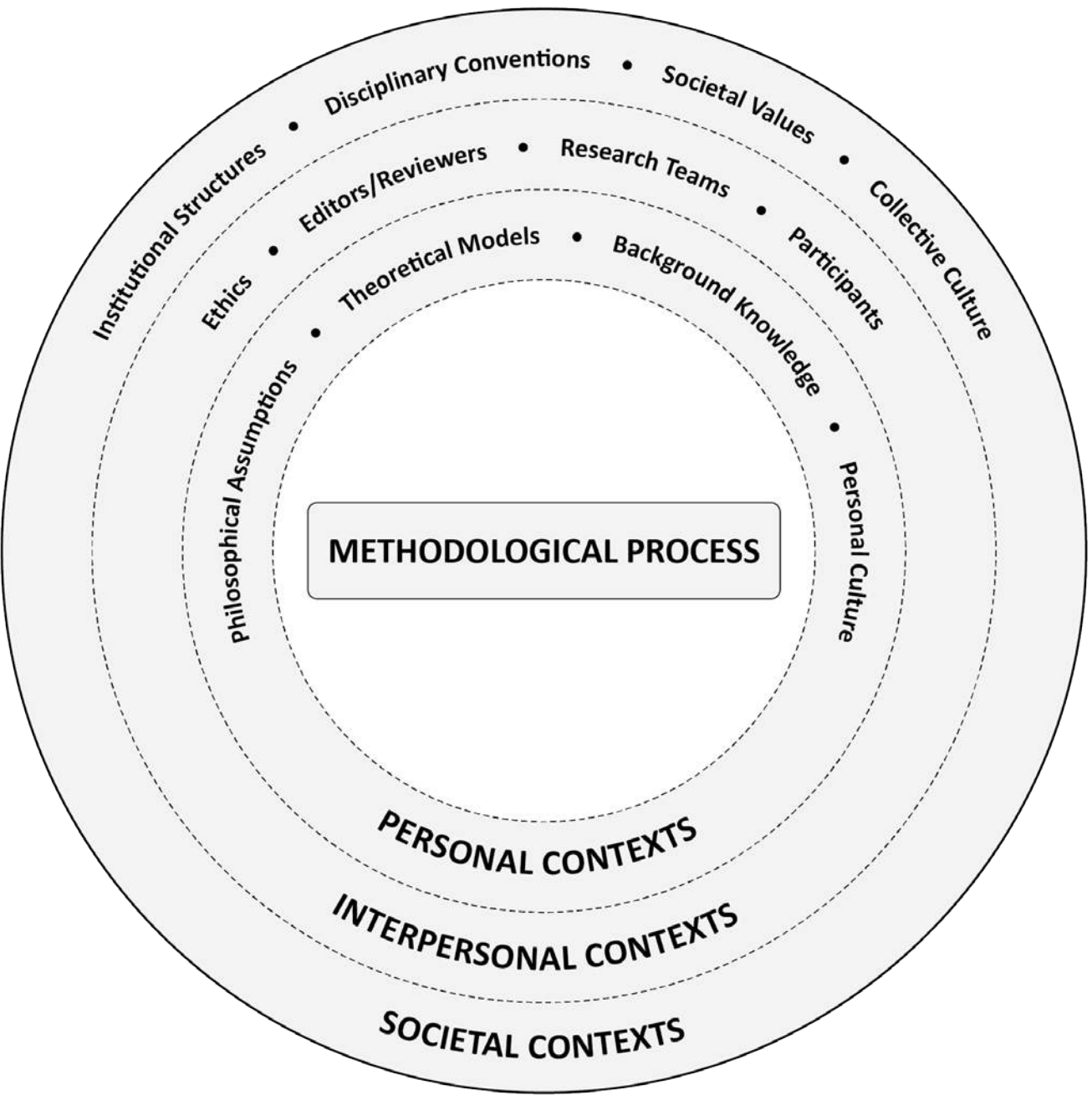
Socio-Ecological Framework of Mixed Methods Research



Socio-Ecological

Framework of Research

Adapted from Plano Clark & Ivankova (2016, Figure 1.2, p. 15)



Whose Contexts?

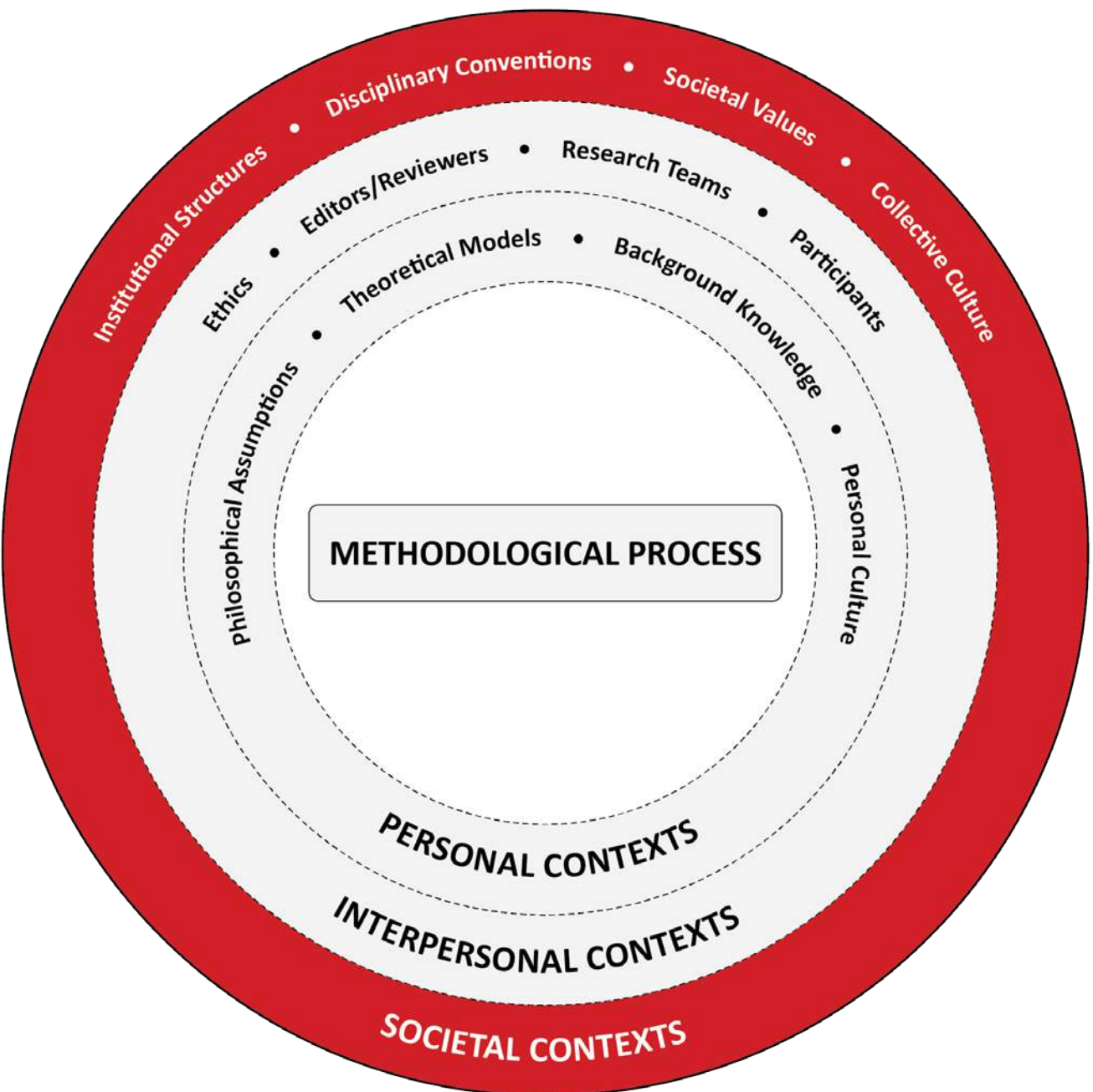
- Funders?
- Institutions?
- Researchers'? (lead or local?)
- Participants'?
- Intersection of these?

Invite conversations across contextual layers



Societal Contexts

Adapted from Plano Clark & Ivankova (2016, Figure 1.2, p. 15)



Institutional Structures

- Promote methodologies & methods
- Programs prefer qualitative or quantitative
- Differently perceive introductory vs. advanced methodologies
- Prefer writing styles
 - Objective 3rd person?
 - 1st person allowed?



Disciplinary Conventions / Communities of Practice

- Expected terminology & allowed meaning space
 - Department
 - Conferences
 - Articles

Meaning space:

Range of meaning nomenclature may convey
e.g. mixed methods

(See Berendt, 2009 re semantic space)



Societal Values: Funding Policies

(Miller, 2015; interview with Brendon Barnes)

(MM as) **Tacit Political Identity** (builds to) →

Research

Language

Quick in & out game

(MM) **Economies** (build to) →

Knowledge economy ~ big business

Methods, books, journals, conferences

Spend to demonstrate good work

Explicit Knowledge

Based on asking wrong questions

North excluding south via journals

Assumes form-filling literacy

Collective Culture (Etic)

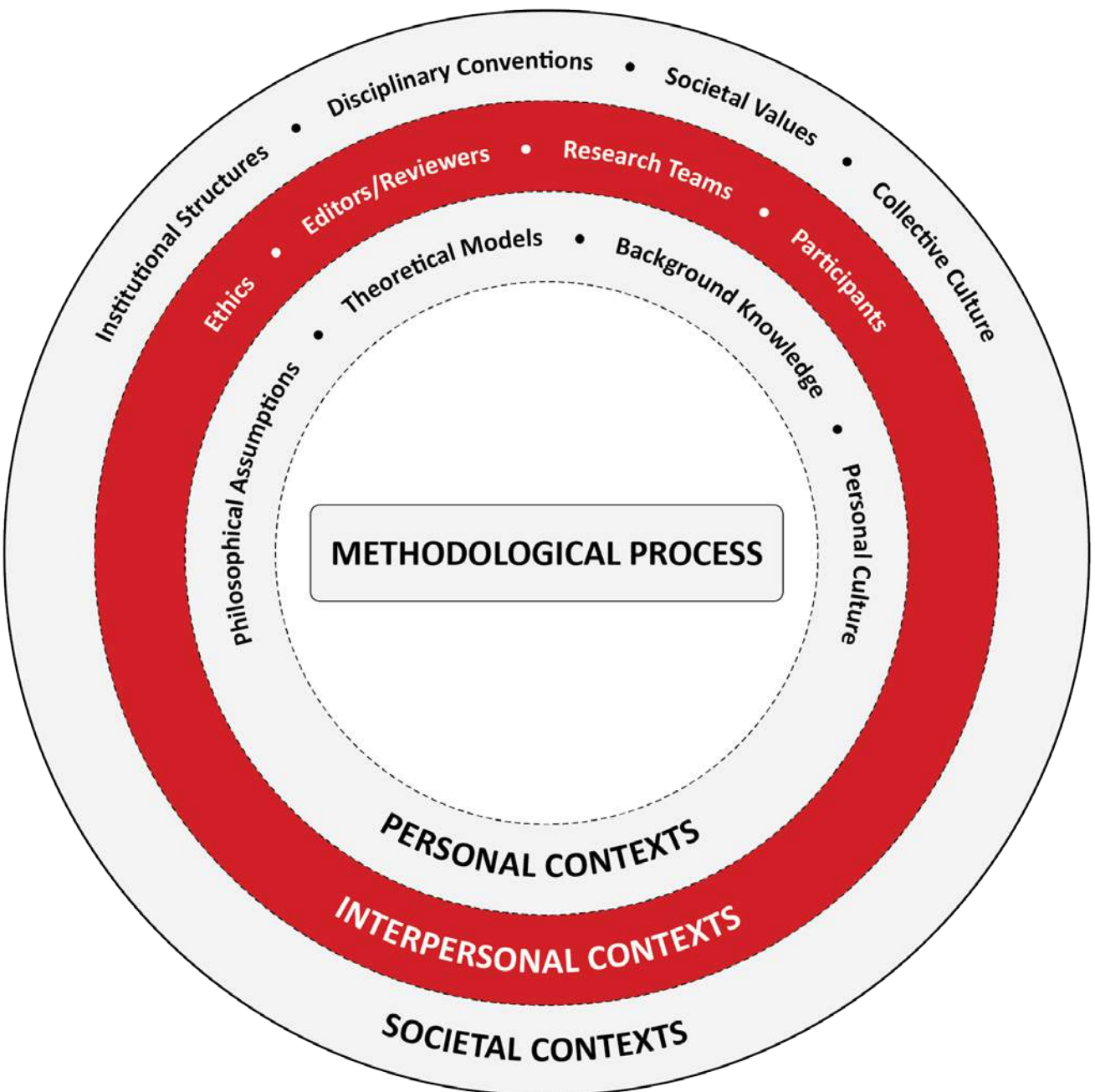
Externally Identified

- Researchers often tacitly or explicitly consider collective culture
- Changes across decades
- Different people relate to different generational cultures



Interpersonal Contexts

Adapted from Plano Clark & Ivankova (2016, Figure 1.2, p. 15)



Context-Relevant Ethics

See Dan Hoyt's series presentation on
[Research Ethics with Minority Communities](#)

- **Get to know participants before consent**
 - May take multiple visits
- Consider helpful amount of information
- Spontaneous language & conversation
- What do stipends convey?

Takes time! – Consider fewer studies done well



Anonymity vs. Autonomy

(Miller, 2015, excerpt from interview with Yolandi Foster)

“We could sense they weren't listening to us ...

We said: ‘No, what's wrong?’

They said: **‘But why did you blur our faces?’**

They were so cross with us, & we said: ‘So what do you want?’

They said: **‘No, I want my name to be there & I want my face to be shown’.**”

Researchers began to lose trust
at the point they imposed anonymity



Editors & Reviewers

- Depth of cultural understanding? (Miller, 2015)
- **Peer review** shaped by (Plano Clark & Ivankova, 2016)
 - Cultural and academic norms
 - Disciplinary practices
- Epistemological traditions and views of scientific norms
- Word limits affect degree of nuance authors can convey
- Political process
 - Who gets to publish? (Miller, 2015)



Diverse Research Teams?

- **Seemingly diverse ethnic culture may camouflage similar personal cultures:**
 - Geographic stability (8 continental moves before age 19)
 - Gender identity/sexuality orientations
 - Neurological orientations
 - Economic & material orientation
 - Parental generation



PI's & Local Researchers

(Miller, 2013, interview with Brendon Barnes)

Principal Investigators Need to

- Give voice / listen to voices / elevate status
- Enable serving as cultural brokers
- Avoid relegating to token roles
- Enable ethical, methodological, & content-related contributions
- Sensitively approach their own roles

Local Researchers May Otherwise

- Feel compelled to remain silent
- Feel like “glorified field workers”
- Not contribute the insights they have

As opportunities arise, engage conversations with funders around allowing local researchers to serve as PIs



Who Does the Study Serve?

(Markham, 2005)

- Does research question serve:
 - Participants perceived needs? or
 - Funders' ability to demonstrate good work? (Miller, 2015)
- **Need meaningful data** based on
 - Open-ended participant input (qualitative)
 - Participant involvement in developing study design & instruments (i.e., **mixed methods instrument design**)



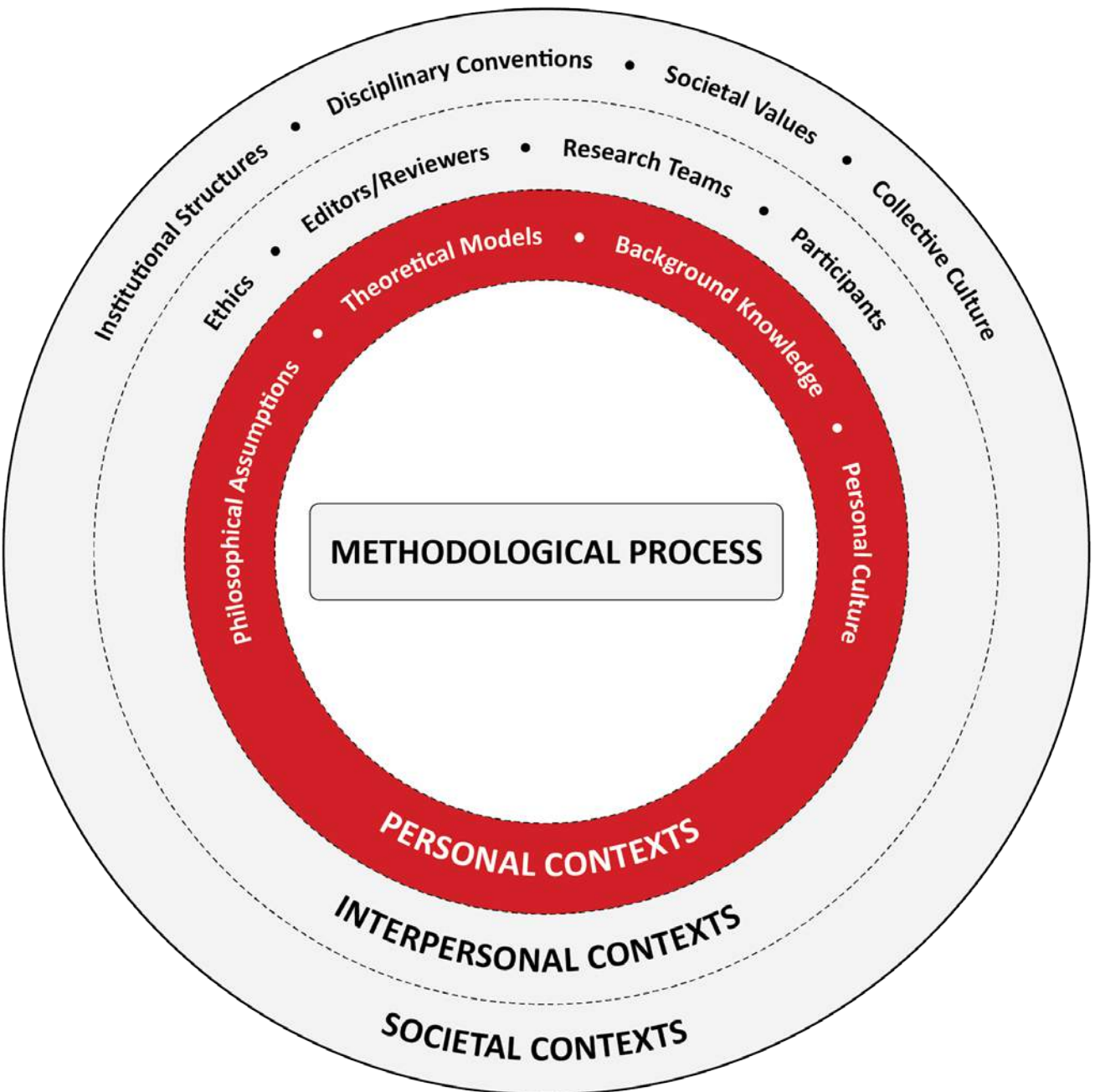
Collaboration: Pros & Cons

- **Pros**
 - By the people, for the people
 - Consider all stages including study design
 - Instrument development (see examples in supplement)
 - Report writing
- **But consider**
 - Participants' perceived freedom to speak up relative to age, generation, & culture of origin (Moses, 2008)



PERSONAL CONTEXTS

Adapted from Plano Clark & Ivankova (2016, Figure 1.2, p. 15)



Philosophical Assumptions

- **Beliefs and values about knowledge**
 - What it is
 - How we can gain it
 - Degree of permissible subjectivity
 - Researchers' or participants'



Theoretical Models (see Plano Clark & Ivankova, 2016)



- **Extent of acknowledgement**
 - Grand theories / conceptual frameworks
 - Middle-range theory
- **Dialectical?**
- **Mixed methods** can bridge both ends



Background Knowledge

- Personal experiences
 - Dispositions & preferences
- Professional experiences
 - Substantive
 - Methodological
- *What is knowledge?*



Researcher vs. Participant Personal Cultures

Seemingly similar collective culture
may camouflage differing personal cultures.



Participants' Personal Cultures

“No two people are the same.”

Even sharing

“language, culture, and ... other attributes,
the same question, answer, or observation
may not mean the same thing.”

(Axinn & Pearce, 2006, p. 46)

Participants' Personal Cultures

(see Shogren, 2013)

- **Intersection of non-categorical dimensions:**
 - Ethnic & linguistic identities
 - Geographic mobility, especially formative years
 - Re-entry (compounded)
 - Gender identity & sexual orientation
 - Neurological orientation (neuro-typicality / neuro-atypicality)
 - Economic / material orientation
 - Societal era

Plastic Bag Ball (Treehugger.com)

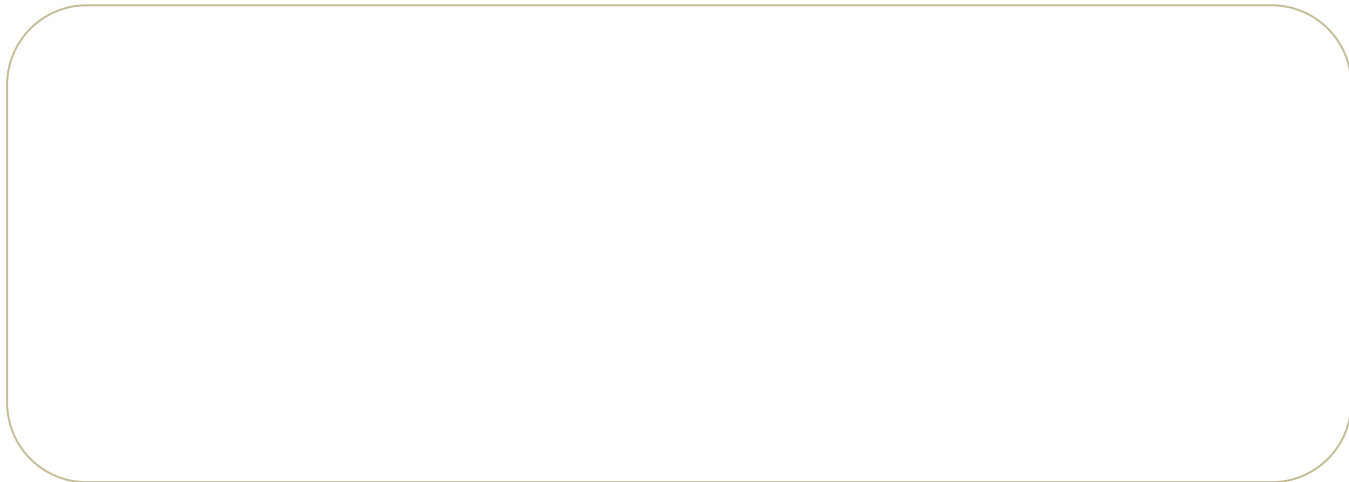


Moment with Your Neighbor

“I live here & I stay there”

(Tongue, 2005)

What does this statement mean to you?



Household Complexity

(Schwede, Blumberg, & Chan, 2005; Chan, 2005; Schwede, 2005)

“I live here & I stay there”

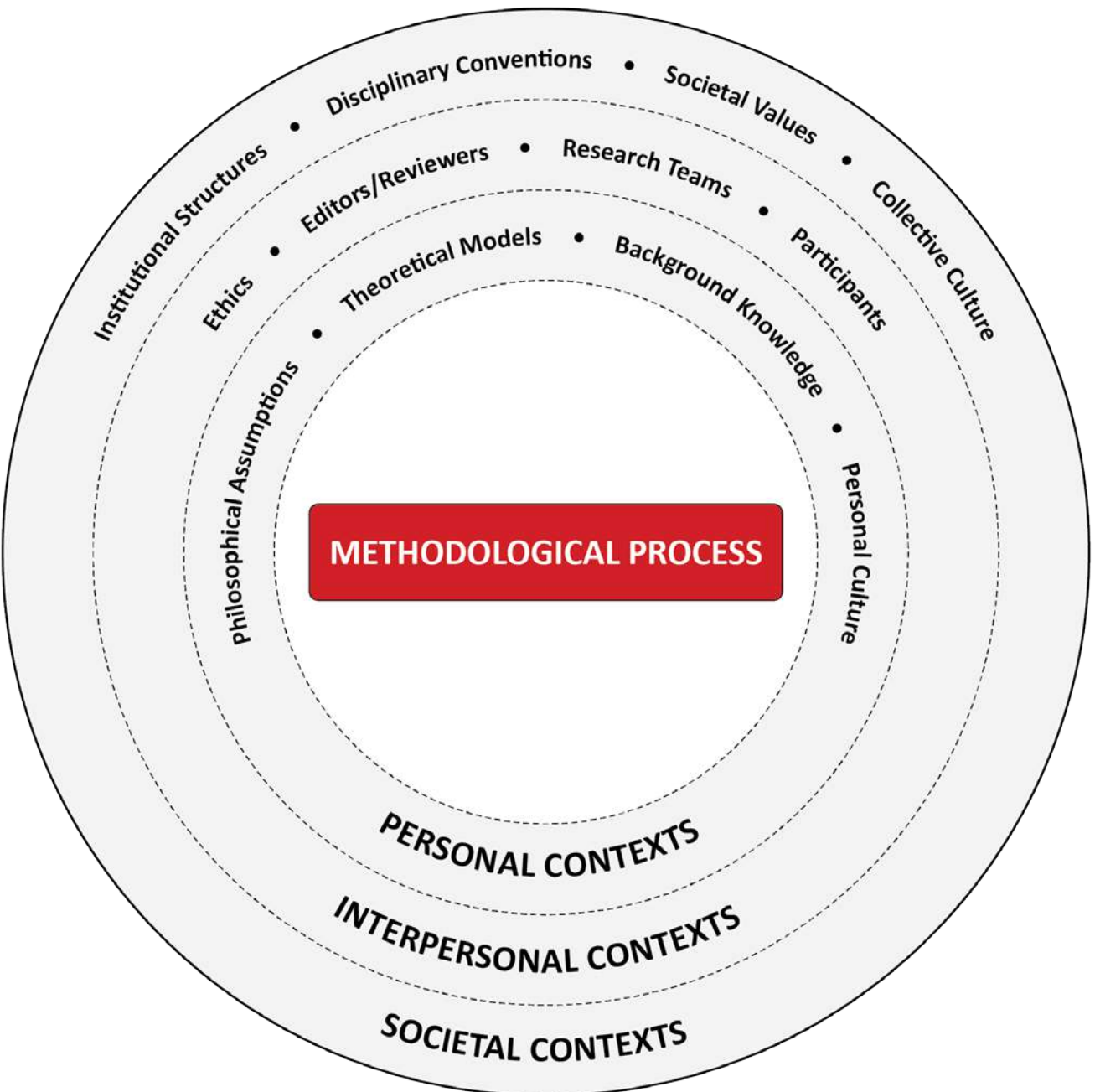
(Tongue, 2005)

- How do household members relate to the householder?
- Lateral extension
 - Cohabiting adult siblings & in-laws
- Perceptions of (‘fictive’) kin



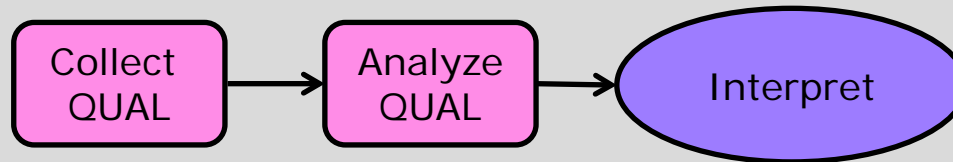
Methodological Process

Adapted from Plano Clark & Ivankova (2016, Figure 1.2, p. 15)

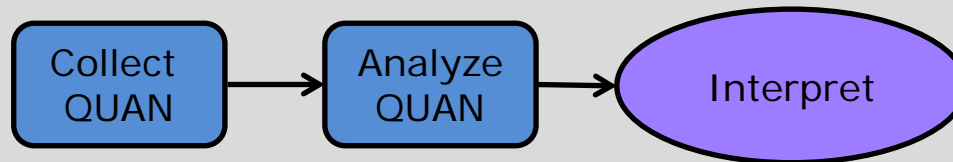


Single Strands

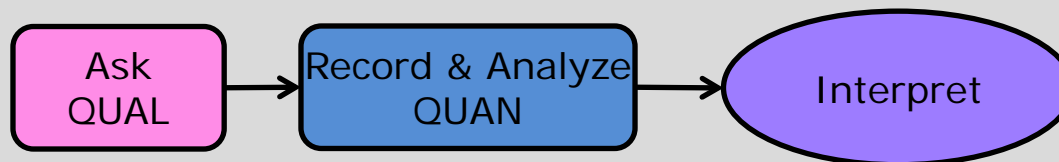
Qualitative Approach



Quantitative Approach

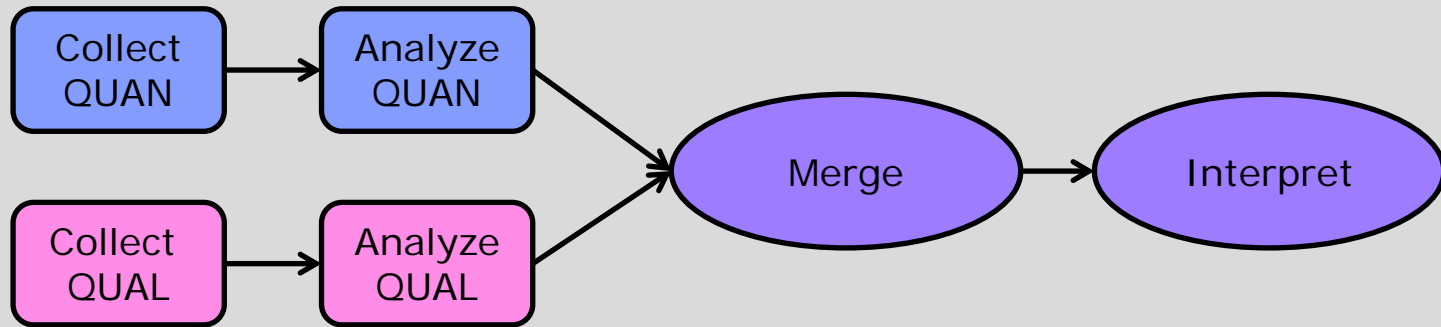


“In-the-Middle” (e.g. event history calendar)

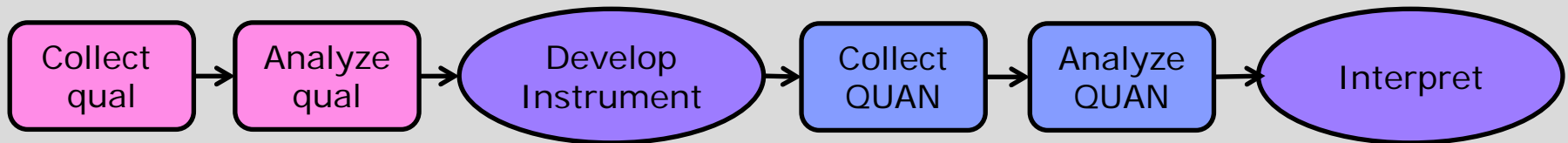


Multiple Strands: Mixed Methods

Convergent



(Exploratory) Sequential

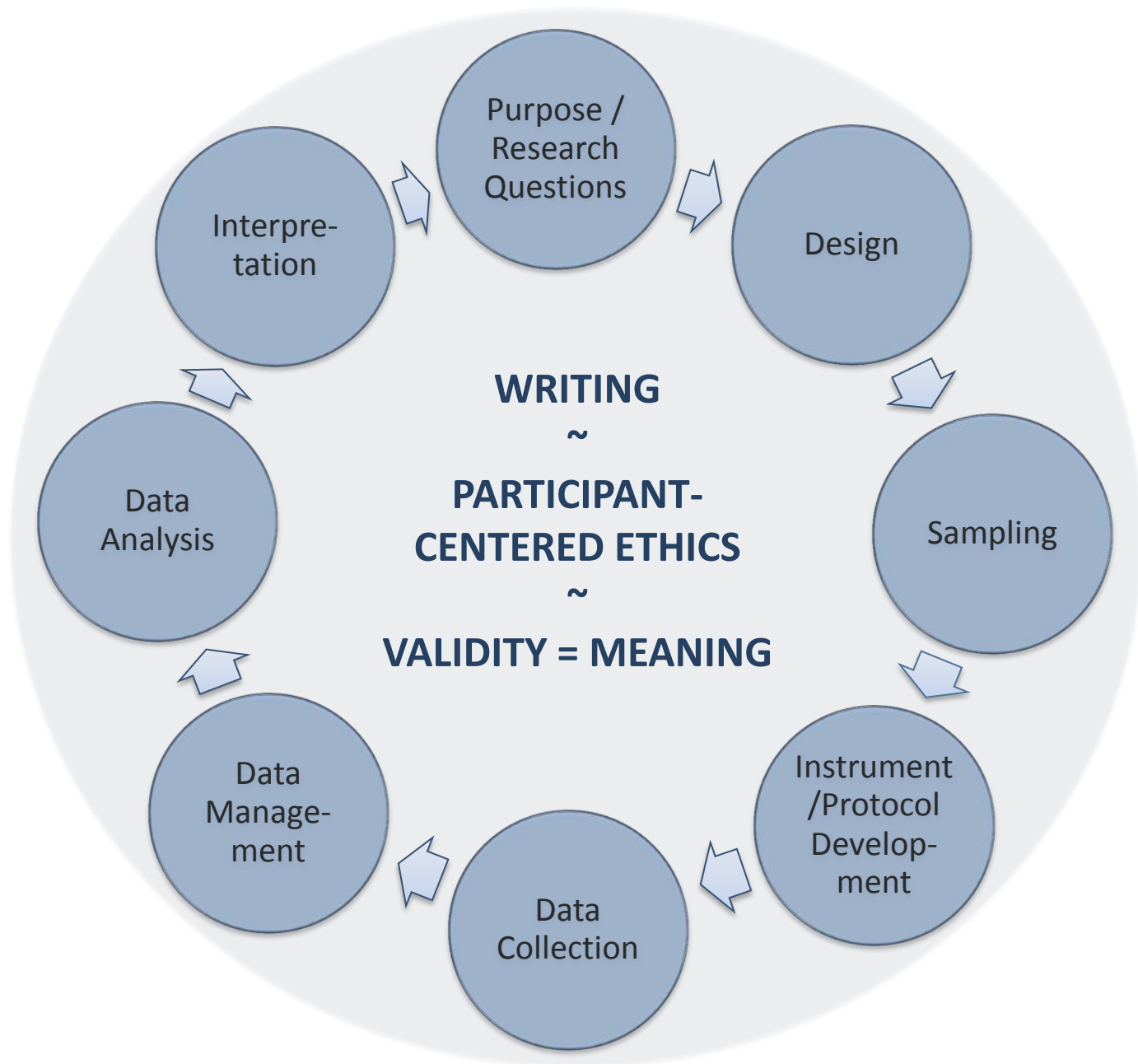


Methodological Quality

- Is quality inseparable from contexts? (rhetorical question)
- Quan & qual agree on importance of contexts
 - Quan – instrument only valid for particular group of people
 - Qual – goal to portray context (Nagata, Suzuki, & Kohn-Wood, 2012)
- **Meaning = quality (= validity)** (Miller, 2015)
 - Just different nomenclature



Research Life Cycle: Iterative



Research Questions

As told by my research participant, Brendon Barnes

(Miller, 2015)

- Funder's intent
 - How well does **hand-washing intervention** prevent the spread of disease?
- But
 - What if community **water is contaminated**?

Consider \$ spent on required MM evaluation due to

- inappropriate question &
- expecting local researcher to serve as “glorified field worker”

Study Design: Collective Culture

- **Survey methodology** (Groves, Fowler, Couper, Lepkowski, Singer, & Tourangeau, 2009)
 - Studying sources of error in
 - Information gathered systematically
 - To quantitatively describe larger population
- **Critical ethnography** (Carspecken, 1996)
- **In the middle**
 - E.g. single strand of event history calendars
- **Mixed methods, e.g.**
 - Instrument development via multiple strands



Sampling: Collective Culture

([Hubbard & Lin, 2011](#))

See Lorey Wheeler's series presentation on [Sampling, Recruiting, and Retaining Diverse Samples](#)

- **Target population**
 - Define across groups, with time frame
 - E.g., Individuals > 18 who slept most April, 2015 nights in [area A] or [area B] housing units
- **Accessible population**
 - **Who can you locate & contact?**
 - **Difference between target & accessible populations**
- **Sampling frames**
 - List most accessible & fewest ineligible population members
- **Precision**
 - Specify overall & within groups
- **Sample frame variables**
 - Each group indicates preferred variables & formats
- **Sample selection procedure**
 - Each group documents

How do you define group membership?

(e.g. interracial? Interethnic?)

Do participants see themselves as part of mainstream?

How familiar are participants with research?

What are your own social mores?

How geographically stable are your participants?

Data Collection Considerations

- **Social exchange for motivational purposes** (Dillman, Smyth, & Christian)
- **Mode**
 - In person?
 - Interviewer-mediated or not?
 - Paper & pencil, voice, or technology-mediated?
 - One-on-one or group implementation?
- **Degree of structure**
 - Collect numeric data in conversational (non-standardized) ways?
- **Narrative / story-telling**
 - Critical to understanding personal culture



Instrument Content & Design

Questionnaire = **content**

Instrument = **design of content**

(Hansen & Lee, 2013)

Questionnaire / instrument:

Vehicle of interesting communication

(Dillman et al., 2014)

See Supplement for Instrument Technicalities



Instrument / Protocol Development: Collective Culture

- Implement existing instruments
 - Previous validation **for original context only**
- Adapt existing instruments
- Develop instruments

See 2014-2015 CYFS series on
Developing Better Questionnaires and Measures

Michelle Howell Smith:

- [Initial Considerations and Construct Operationalization](#)

Ann Arthur:

- [Constructing and Testing the Instrument](#)

Leslie Hawley:

- [Psychometric Review](#)

Other Data Collection: Visual Projection + Conversation



Mmogo-Method™ Materials
(Roos, 2015)



Visual Representation of an
Empty Container and the
Despair of an Older Person

(reproduced from Figure 18.1 of Roos, Chigeza,
& van Niekerk, 2013, p. 381)



Non-Verbal Response Card

for Function as Proxy for Depression

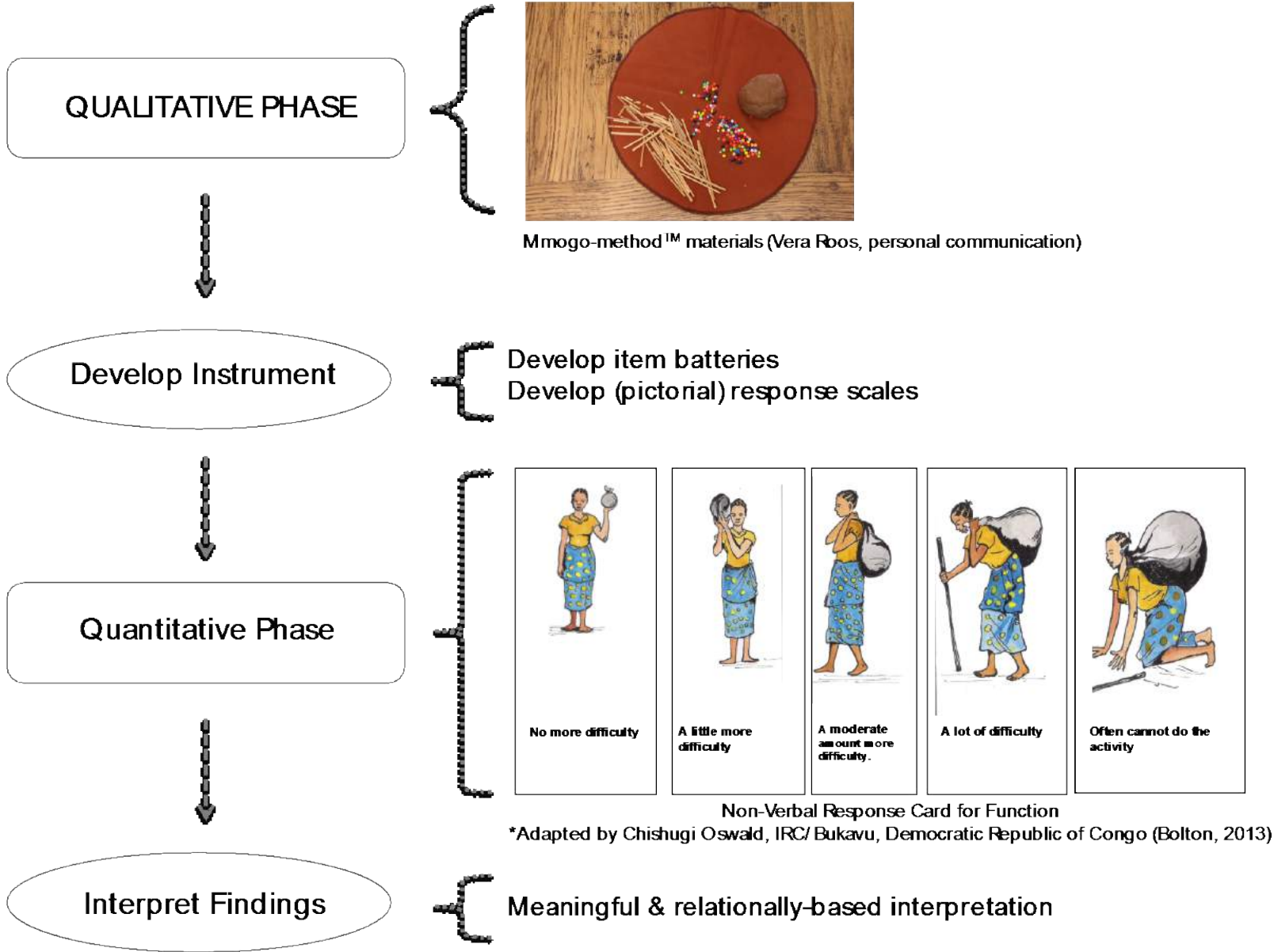


Adapted by Chishugi Oswald*, IRC/Bukavu
Democratic Republic of Congo

**Chishugi wants his work widely shared & freely adapted*
Bolton (2013, personal communication)

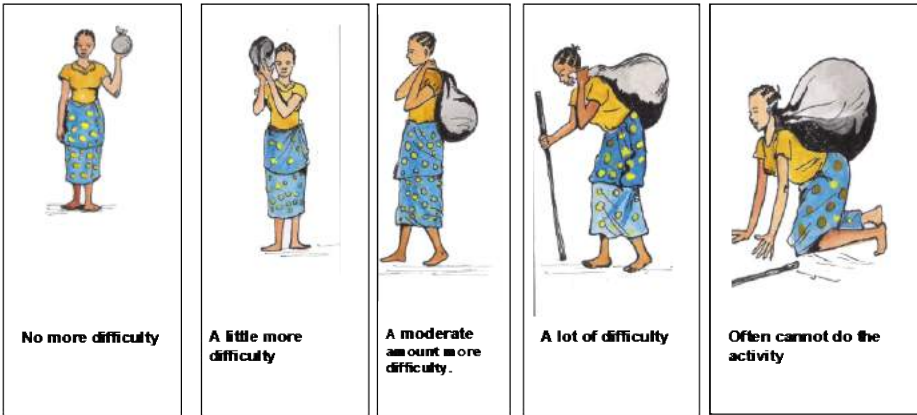
Mixed Methods Instrument

Development for S. Africa (Miller, 2015)



Mmogo-method™ materials (Vera Roos, personal communication)

Develop item batteries
Develop (pictorial) response scales



Non-Verbal Response Card for Function

*Adapted by Chishugi Oswald, IRC/ Bukavu, Democratic Republic of Congo (Bolton, 2013)

Meaningful & relationally-based interpretation

Pretesting: Collective Culture



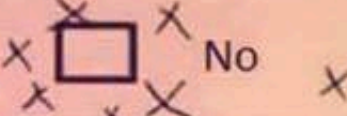
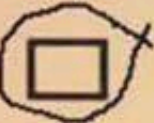
(Caspar, Peytcheva, & Cibelli, 2011; Goerman & Caspar, 2010; Goerman & Clifton, 2011)

- **Field**
 - Participant & interviewer debriefings, behavior coding
 - Pilot: **'dress rehearsal'** of data collection with materials
- **Cognitive methods**
 - Vignettes, concurrent or retrospective think-alouds
- **Other**
 - Usability testing
- **Statistical**
 - Multi-trait, multi-method; item response theory



Extracurricular Communication 😊

scontent-dfw1-1.xx.fbcdn.net

<p>Are you childish?</p> <p><input type="checkbox"/> Yes</p> <p><input checked="" type="checkbox"/> No</p> 	<p>Are you nervous?</p> <p><input type="checkbox"/> Yes</p> <p><input checked="" type="checkbox"/> No</p> 
<p>Are you paranoid?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No, why?</p>	<p>Are you racist?</p> <p><input type="checkbox"/> Yes</p> <p><input checked="" type="checkbox"/> No</p>
<p>Are you drunk?</p> <p><input type="checkbox"/> Yes</p> <p><input checked="" type="checkbox"/> No</p> 	<p>Are you an idiot?</p> <p><input type="checkbox"/> Yes</p> <p><input checked="" type="checkbox"/> No</p> 

Qualitative Analysis: Collective Culture Across Time & Space

(Lofland, 1971)

Macro-to-micro analysis

1. **Settings**
2. **Relationships**
3. **Participation** (roles)
4. **Meanings** (themes)
5. **Activities**
6. **Acts**

Micro-to-macro analysis

1. **Acts**
2. **Activities**
3. **Meanings** (themes)
4. **Participation** (roles)
5. **Relationships**
6. **Settings**



LITERACIES & LANGUAGE



Multiple Literacies

- Vary by context
 - Per home & educational cultures
- No single literacy
 - Scholastic reading \neq strong understanding of instruments
- **Numeric Literacy**
 - Lack of numeric literacy \neq lower intelligence
 - Implementing quan requires particular numeric literacy
(Miller, 2015)
 - Historical nature of mathematical literacies in culture of origin
(Feza-Piyose, 2012)
 - Survey responses involve numeric or categorical representation
(Miller, 2015)

Non-Singular Languages: e.g. Englishes & Spanishes

- World Englishes
- Spanishes
- Ethnic languages
- Languages of less obvious diversities
- Mother Tongues
 - Non-singular, non-dominant Englishes



Back-Translation: e.g. Happy Birthday

- Afrikaans:
 - *Veels geluk liewe maitjie, omdat jy verjaar*
- Literal back-translation:
 - *Lots of luck, dear little mate, because you new year*

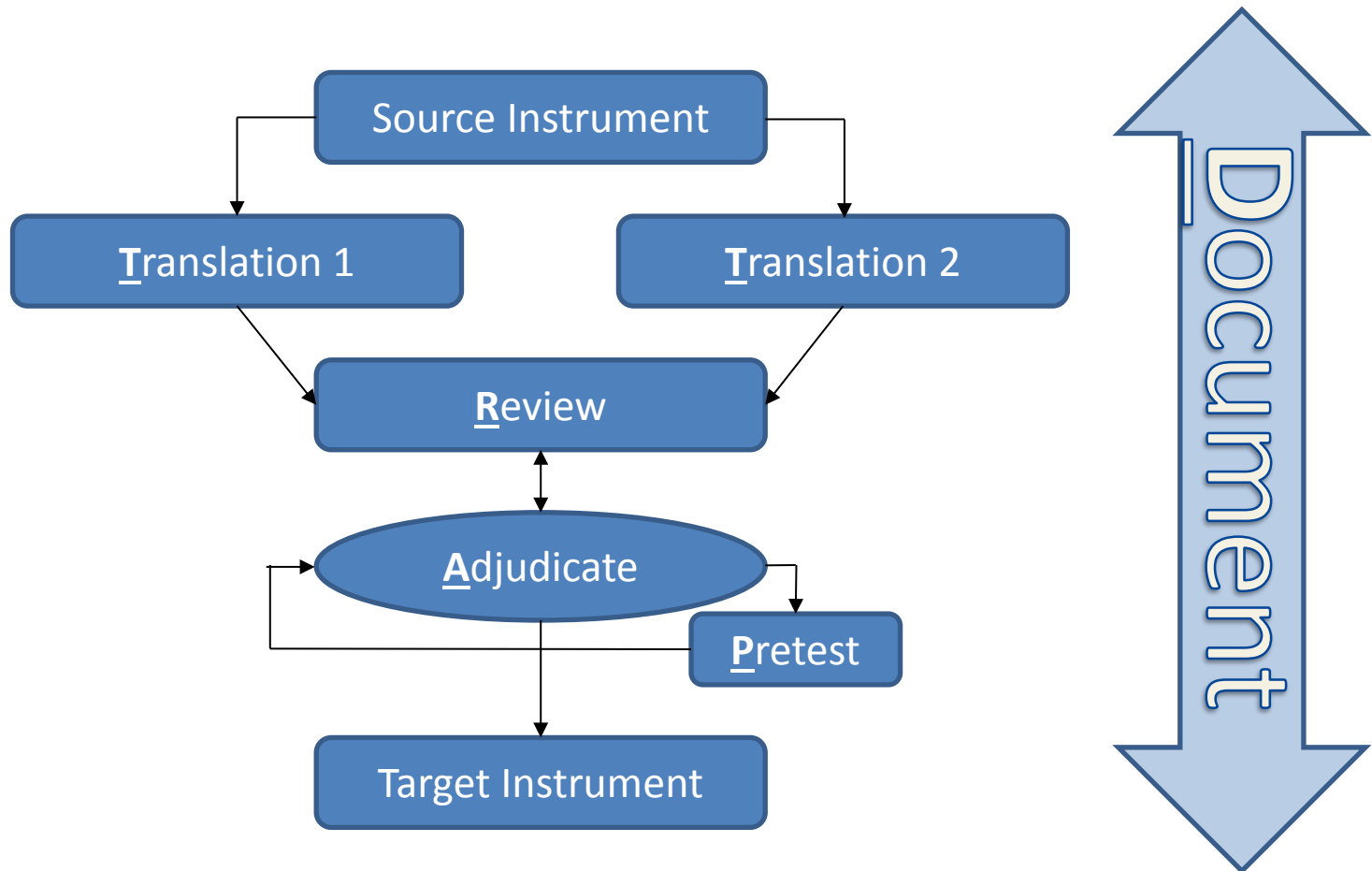
Would you accept this back-translation?



TRAPD Team Translation Model:

Translation, Review, Adjudication, Pretesting, and Documentation

(Recreated from Harkness 2013; see also Willis et al., 2010)



Implementation: Linguistic Analysis

- **Domain analysis** (Spradley, 1979, 1980)
 - Relationship between words within a category
- **Conversational analysis** (Tannen, 2007)
 - Repetition & imagery in dialogue
- **Discursive analysis**
 - Gee's Toolkit (2014a, 2014b)
 - Pronoun tool helped resolve S. African interview inconsistency
 - Critical discourse analysis (e.g., Machin & Mayr, 2012)



WRAPPING UP



Take-Away Points

- Cultures are complex
- Collective culture camouflages complex personal culture
- Need to account for personal cultures to account for meaning (i.e. validity)



Recommendations

- Foster **relational respect** & communication between
 - Study funders, ethics reviewers, researchers, participants, publishers
- Ask **research questions** relevant for community
- **Collaborate**
 - Across diverse personal cultures on a team
 - With participants' of similar personal culture to population
- Embrace *less is more*
 - **Allow time** for rapport & story-telling (multiple visits?)
- Allow research plans to change
- Present material in ways that calm anxieties without oversimplifying conceptual relevance



Closing Vignette: Scientific + Indigenous Knowledge + more

Green (2012)



- Oceanographer & fisherman go down to the sea
- Each has completely valid means by which to study the ocean
- Neither means is sufficient to know the vastness of the ocean
- Combine both means for more than either alone
- Continue to look for newer means



Thank you

Gracias

谢谢

Siyabonga

Baie dankie

See supplementary handout for further details & references

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Methodology Application Series

February 5, 2016

PERSONAL CULTURE



Personal Culture: Capturing Ethnic Identity

(Lucero, 2014, per phenomenological study of Native women in urban environments, p. 9)

- “It's not about place, it's about what's inside”
- Connection vs. identity

Cultural identity	<ul style="list-style-type: none">• Relatively stable (but consider mobility among other groups--DM)• Independent of geographical location• Unaffected by cognitive & behavioral adaptation
Cultural connection	<ul style="list-style-type: none">• Relationship to other [Native] people• Active cultural involvement• Cultural knowledge

- U.S. contextual perception of (single) pan-ethnic ‘Black’
 - What about adolescents from West Africa in U.S.? (Roubeni, 2015)



Geographic Mobility: Migration & Re-Entry

- Problems of belonging in-between (Krzyzanowski & Wodak, 2008)
- Impact of cultural transition during adolescence (Naraghi, 2013)
- Re-entry (return migration) to place of origin in later life → poor mental health (Leavey & Eliacin, 2013)
- High mobility → **hybrid cultural identity** which may trump ethnicity
 - (Greenholtz, 2009, multimethod single case study)
 - (Vasikaran, 2010, hermeneutic phenomenology)

Geographic Mobility: Debbie Miller's Formative Years

- My personal history catapulted me into passionate interest in all-things cultural:
 - Born in U.S. to Midwest parents
 - Lived formative years in southern Africa (10 mos-19 yrs)
 - Moved within continent more than once each year
 - Moved across continents 8 times
 - My accent sounds American (when I speak to Americans)
 - Identify transculturality rather than as 'American' or 'South African'

Personal Culture: Linguistic Identity

- Culture & linguistic identity (Piller, 2007)
- Linguistic identity and oral interaction (Coulthard, 2008)
- “Language attitudes and ethnolinguistic identity in South Africa” (Bekker, 2003, p. 1)



Personal Culture: Gender & Sexual Orientation

- (Short) Bem Sex-Role Inventory (Bem, 1974)
- “Combined effects of gender roles and socio-economic status on characteristics [desirable] in a long term mate” (March, 2014, p. 35)



Personal Culture: Neurological Orientation

- Cultural studies (Osteem, 2008)
 - Often nominalize / categorize disabilities as “artifacts of the disciplines that measure them” (p. 1)
 - Hides multidimensional aspects
- Nature of autistic self-awareness (Roth, 2008)



Personal Culture: Implicit Generation

- Age of parents at participant birth
- Number of siblings
- 'Only' children of older parents relate to older generations



COLLECTIVE CULTURE



Approaches “In the Middle”

(aka, one strand, between quan & qual)

- Include MM plus single-strand/mid-stream approaches
 - e.g. event history calendar
- Cultural domains (Bernard, 2011, p. 224)
 - Free listing
 - Card/pile sort
 - Sentence frames
 - Triad tests
 - Paired comparisons



Collective Culture: Multimethod Ethnosurveys

(Massey, 1987)

- Designed to overcome limits of federal immigration statistics

“Migration is a process, not an event” (p. 1498)

A move → ambiguity *“of settlement, residence, & place ... socially constructed & culturally variant”* (p. 1498)

Multiple moves → Complexity per multiple origins & destinations

Nepal Multilevel Mixed Methods with Event History Calendars

(Axinn & Pearce, 2006)

- Systematically sampling anomalous cases
- Neighborhood calendars
 - GIS & contextual data for landmarks
- Life history calendars
 - For groups who do not record time
- Longitudinal data collection
 - Mixing methods
- Need for introspection



Nepal Multilevel Mixed Methods with Event History Calendars

(Axinn & Pearce, 2006)

Coding responses from an unfamiliar language as numbers and statistically analyzing those numbers does not substitute for the understanding common language can provide (p. 190)


 *Measurement Error*

- Partner with local inquirers for common language understanding

“Simultaneous or sequential integration of **less structured data collection** methods” is intended to help overcome “the threat to causal interpretation” arising from lack of understanding “social mechanisms that link cause and consequence” (p. 190)

- Social demographers can no longer “simply ... count numbers of people in other countries” (p. 190)

Event History Calendar

Landmark *Asking mothers in Nepal about children to whom they have given birth*
 events:  *Flood* *Local school opened*

Child #	'99	'00	'01	'02	'03	'04	'05	'06	'07	'08	'09	'10	'11	'12	'13	
01	B	D														
02				B	S								Q			
03						B	S							Q		
04							BD									
05									B	S						
06											B		X			
07																
08																

Codebook

B = birth
D = death
S = school
Q = quit school
X = left home

Adapted from Axinn, Pearce, & Ghamire (1999)
 see Belli, Stafford, & Alwin (2009) for general Event History Calendars
 see Axinn & Pearce (2006) for Mixed Methods Event History Calendars in Nepal schools
 © Copyright by Debra R. Miller (2016)

Mixed Methods for Cross-Cultural Research

(van de Vijver & Chasiotis, 2010)

- Perceived incompatibility of quan & qual “easily overrated in the everyday practice of cross-national research” (p. 455)
- “Potential of [MM] for culture-comparative research” (p. 456)
 - e.g. #1 -- Quan: political preferences; Qual: historical analysis
 - E.g. #2 -- Qual: explore attitudes & behaviors; Quan: compare test scores
- Contexts of discovery (psychology) & justification (scientific logic) (Reichenbach, 1938)
 - Implies quan/qual boundaries more blurred than they are



Myths re Quan/Qual Relationship

(van de Vijver & Chasiotis, 2010)

- Study cultural specifics via qual & universals via quan
 - Many cross-cultural survey constructs have universal & culture-specific components, e.g.
 - Not: Is depression universal?
 - But: "Which aspects of depression are universal?" (p. 460)
 - Requires methodological flexibility
- Reifying MM expected to provide value
 - i.e. Avoid focusing only on MM as its own paradigm
 - MM & methods are means to an end (see also Miller, 2015)



Strengths & Weaknesses of Qual/Quan

(van de Vijver & Chasiotis, 2010)

Less structure (e.g. qual)

- Enables finding novel info
- Less instrument restriction = more diverse info
- Build models, generate hypotheses
- Approach new circumstances with open-mind

More structure (e.g. Likert scales)

- Test cross-cultural differences
- Less suitable without theory to guide instrument choice

Cross-context applicability (Sale & Brazil, 2004)

Quan – needs external validity

Qual – needs fittingness or transferability

Inquirer/participant interactions → unique findings per context

Good Cross-Cultural Study

(van de Vijver & Chasiotis, 2010)

- Starts by examining the cultural context (often qualitative)
- Often followed by quantitative component (p. 472)

**More in-depth studies
of fewer cultures
would allow integrating qual & quan
in more stages**

(see also Miller, 2016)



“Concepts we don't have in the U.S.”

(Vartan, 2014)

Term	Linguistic Origin	Meaning
Friluftsliv	Norwegian	“Free air life”
Shinrin-yoku	Japanese	“Forest bathing”
Hygge	Danish	Mental “togetherness” or “coziness”
Wabi-sabi	Japanese	Embracing the imperfect
Kaizen	Japanese	“Continuous improvement”
Gemütlichkeit	German	Sitting in a “chair surrounded by close friends & a hot cup of tea, while soft music plays in the background” (Constanze, 2014)
Jugaad	Hindi	“Repair derived from ingenuity”

Food for thought

What concepts do we try to measure outside our own culture(s) that lack meaning or involve different dimensions in those cultures?



Collaboration for Instrument Development

- Axinn, Barber, & Ghimire (1997)
 - Determined neighborhood events for event history calendar
- Bolton & Tang (2002) – see Methodological Processes
 - Developed pictorial rating scale for “population-specific function” (p. 538)
- Agans, Deeb-Sossa, & Kalsbeek, (2006)
 - Seeming lack of memory re last menstrual period = different way of counting days
 - “Did not plan” pregnancies = did not control exact time (p. 218)
- Chillag et al. (2006)
 - Selected preferred mode of administration for sensitive topic
- Frör (2006)
 - Enabled using less expensive mail questionnaire versus face-to-face

Implementing Instruments Across Cultures

Criteria for Questions

Bowden, Fox-Rushby, Nyandieka, & Wanjau (2002, p. 323)

- Omit negative/double negative
- Single idea per question
- Typical daily language level
- Avoid technical wording
- Specify role of person to answer each question (head of household?)
- Distinguish singular vs. plural pronouns, e.g. 'you'
- Consider change across time
- Clarify time periods
- Ensure questions make sense to a wide range of people
- Disambiguate meaning of 'yes' or 'no'
- Show relationship of question to questionnaire topic

Technical Considerations

Hansen & Lee (2013); Smith (2003)

- Consider connotations of
- Unlucky numbers
- Colors
- Directional arrows (e.g. meaning of up vs. down)

Translating Technicalities

(see Hansen & Lee, 2013)

	American English	British English
Date	01/13/16	13/01/16
Time	12 hour	24 hour
Numeric Terms	Billion = a thousand million	Billion = a million million
Numeric Formatting	1,000	1 000
Measurement	American	Metric (rest of world)

Other Considerations

- Holidays, day week starts
- Name & address sequences: Le Kang or Kang Le?
- Currency: Location of symbol & negative sign
- Question marks: 'What are you saying?' or '¿Qué estas diciendo?'



Linguistic Communication

- Communication:
 - More than literal words & sequence
 - Dialogic meaning: personal history of each communicator
- Words: **Symbolize** personal & context-based meaning
- Constructs: Manifest differently across cultures
 - E.g. Depression as function (Bolton & Tang, 2002)
- Grammar & syntax: Vary across languages & versions
- Back-translation:
 - Assesses word vs. underlying meaning

Final Formatting

- After translating / adapting instruments, check that items have not:
 - fallen off the page
 - been omitted
 - rotated in a different sequence
- Allow flexible layout of instrument for different lengths of translated items



Linguistic/Rhetorical Analysis

(Lakoff & Johnson, 2003; Catalano & Creswell, 2013)

- **Cognitive linguistics**, e.g. subconscious metaphor
 - Talking about one thing (**target**) through another (**source**)
 - E.g. **ARGUMENT IS WAR**
 - *“Your claims are indefensible”*
 - **Target** = indefensible claims (what is actually said)
 - **Source** = war (implied)

“The way we think,
what we experience,
and what we do every day ...
is very much a matter of **metaphor.**”

(Lakoff & Johnson, 2003, p. 3)

Measuring Intercultural Competence

- The **Intercultural Development Inventory (IDI)**
 - “an assessment tool that measures the level of **intercultural competence/sensitivity** across a developmental continuum for individuals, groups, & organizations & represents a theoretically grounded measure of this ... for perceiving cultural differences and commonalities & modifying behavior to cultural context”
(Hammer, 2011, p. 474)
- IDI relative to psychological capital (see Sasoon Fagan, 2013)



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